Pre-Purchase Check

Issuing date: 15/06/11
Report No. 232324 (1st test)

Client:	--		
Supplier:	--		
Product:	Microwave Oven		
Product reference:	--	**Client reference:**	--
1st Order:	Yes ☒ No ☐	**Ordered before:**	0 Time(s)
Electrical rating:	230-240 V~ 50Hz Class I Rated wattage: Microwave: 1400 W Grill: 1000 W Microwave frequency: 900 W 2450 MHz Cord length: 935 mm	**Power deviation:** (EN 60335, cl.10.1, Table 1)	Measured value: Microwave: 1385W Grill: 995.6W Deviation limit: Microwave: +15 % Grill: +5 %, -10 % In compliance with the standard: Yes ☒ No ☐
Weight:	13.595 kg		
Cavity Dimension:	197mm (H) x 315mm (W) x 345mm (D)	**Usable volume:**	20.43 L
Samples:	1 sample received on 30/03/11 (ID: 110301100497)		
Standards used:	EN 60335-1:2002+A11:2004+A1:2004+A12:2006+A2:2006+A13:2008+A14:2010 EN 60335-2-9:2003 + A1:2004 +A2:2006 +A12:2007 EN 60335-2-25:2002 +A1:2005 +A2:2006		
LVD test report:	Report no.: GLESO09010001001 & GLESO09010001002 & GLESO09010001003 & GLESO09010001004 & GLESO09010001005 & GLESO09010001006 & GLESO09010001007 & GLESO09010001008 & GLESO09010001009 &GLESO09010001010 Received date: 07/06/11		

Components colors:

- Enclosure: Silver
- Oven Window: Transparent with black grid
- Turntable roller: Grey
- Glass Tray: Transparent
- Handle: Silver
- Function setting knob & Timer knob: Silver with black inscription

Temperature of accessible parts:

- Handle: 30.65℃
- Function setting knob: 45.53℃
- Timer knob: 46.88℃
- Top inclusion: 76.05℃
- Window: 111.91℃

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Result summary

Risk assessment result: Degree of injury: **Serious**
Overall probability of injury: **Medium**
This risk is evaluated to be **MODERATE.**
Risk assessment report is linked to inspection No 240311.

ErP test result: Pass

User Test result: 77 Insufficient

- 3 points: Dirt spot on front top corner.
- 2 points: The timer knob has play.
- 3 points: The control panel has play.
- 5 Points: After cooking 30 min with Microwave function, some bad smell was observed (Score 1).
-10 Points: Plastic frame used to fix the window was a bit distorted after the grill function heating test.

Remark: Only English version compulsory safety warning "Microwave Energy - DO NOT REMOVE THIS COVER" on the test sample.

Construction Check result: Fail

Trade name or trade mark was missing on test sample.

Rated voltage marked on the rating label (230V) was different from GS report listed (230-240V).

Model no. marked on the rating label and user manual (GMD259DAH-SA0C0E) was different from GS report listed and customer required (D90D25SL-DA).

Internal wires were not listed on the CDF except for connected with grill.

Remark: The winding class of motor used in test sample (E and B) was expressed by the other way (120℃ and 130℃) on the CDF.

	Date:	Tested by:		Approved by:	
ErP	08/06/11		Jason Zhang		Hanker Hu
U.T.	08/06/11		Jason Zhang		Hanker Hu
C.C.	14/06/11		Jason Zhang		Hanker Hu

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Section 1: User Test

Testing conditions:		
Ambient temperature	27	℃
Ambient relative humidity	58	%

No.	Test items	Comments			Result API	Result Client
1	**Workmanship / Overall quality**	Accessory fitting		Door Open /Close	**Pass**	
				Rolling plate	**Pass**	
				Socket	**Pass**	
				Timer Remark: The timer knob has play. (Photo 1)	**Fail**	
				Function setting	**Pass**	
		Appearance check		Remark: dirt spot on front top corner Remark: The control panel has play. (Photo 2 and 3)	**Fail**	
		Power test		Microwave: 1385W Grill: 995.6W (Photo 4 and 5)	**Pass**	
2	**Function / Features**	Operation	Timer	Measured value is 1 min 54s. Setting is 2min (Photo 6）	**Pass**	
		Function	Cooking	Cooking a bowl of rice Time: 24 min 34 s (Photo 7 and 8)	**Pass**	
			Grilling	Grilling two pieces of bread (Photo 9 and 10) Time: 3 min 11 s Remark: The heating distribution is not equal. The color of the bread at middle is darker than at the side.	**Pass**	
			Convection (If applicable)		**N/A**	

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No.	Test items	Comments			Result API	Result Client
			Combination mode	Cooking scrambled eggs Time: 7 min 29s (Photo 11 and 12)	**Pass**	
			Defrosting	Defrosting some pork meat Time: 11 min 46 s (Photo 13 and 14)	**Pass**	
			Setting	For every temperatures setting of the microwave a glass of water was heated for 2 min. Below are listed the temperature rising for each setting 18 %: 9.8 K 36 %: 16.6 K 58 %: 38.3 K 81 %: 57.1 K 100 %: 71.4 K	**Pass**	
			MW distribution	Five glass filled witch 200ml water was heated 2 min (Photo 15)	**Pass**	
			Clock (If applicable)		**N/A**	
			Time to preheating to grill	Time of preheating: 15 min 5 s Measure the temperature on the grid 195.13 ℃ (Photo 16 and Graph 17)	**Pass**	
		Safety test	Smell after 30 min	Remark: Cooking 30 min after, some bad smell was observed. (Score 1)	**Fail**	
			Microwave stops when opening door		**Pass**	
			Ventilation		**Pass**	
			Door switch		**Pass**	

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No.	Test items	Comments			Result API	Result Client
2	**Function / Features**	Safety test	Abnormal noise, vibration, spark		**Pass**	
			Rolling plate		**Pass**	
			Heating test	Window: 111.91℃ Handle: 30.65℃ Function setting knob: 45.53℃ Timer knob: 46.88℃ Top inclusion: 76.05℃ (Photo 18, 19, 20, 21, graph 22 and graph 23)	**Pass**	
			Temperature of the surface under the appliance	Max time setting (<1H): 49.2 ℃ (graph 22)	**Pass**	
			Time to cool down	Within 53 min 45 s, the temperature oven inside fell from 195.13 ℃ down to 34.98 ℃ (Graph 24)	**Pass**	
		Maintenance	Cleaning		**Pass**	
		Precaution	Smell test	Unpacking	**Pass**	
				Normal use: 1	**Fail**	
		Plastic frame used to fix the window was a little distortion after grill function heating test. See the photo			**Fail**	
3	**Documents**	**LVD/GS report** ☒ **EMC report** ☒ **LVD/GS certificate** ☒ **EMC certificate** ☒ **EMF report** ☒ **PAH** ☒ **LFGB** ☒ **BOM** ☒ **ROHS product report** ☒ **EUP report** ☒ **ROHS components report** **%** **User manual** ☒ **Language: English** **Explosion drawing** ☒ **Circuit diagram** ☒ "☒" denotes the document is available during the check:				

Evaluation Result:	**77 Insufficient**

Key:

100 pts.:	**Excellent**	70 - 79 pts.:	**Insufficient**
90 - 99 pts.:	**Good**	60 - 69 pts.:	**Bad**
80 - 89 pts.:	**Satisfactory**	< 60 pts.:	**Unacceptable**

The test result exclusively refers to the sample(s) tested.
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Section 2: Construction Check

According to EN 60335

Clause of the standard	Test items	Comments	Result
7	**Marking and instructions**	- Trade name or trade mark was missing on test sample. - Rated voltage marked on the rating label (230V) was different from GS report listed (230-240V). - Model no. marked on the rating label and user manual (GMD259DAH-SA0C0E) was different from GS report listed and customer required (D90D25SL-DA).	**Fail**
8	**Protection against electric shock**		**Pass**
16	**Dielectric strength**		**Pass**
20	**Stability and mechanical hazardous**		**Pass**
21	**Mechanical strength**		**Pass**
25 & 26	**Supply connection and terminals**		**Pass**
27	**Provision for earthing**	The earthing screws can withstand 5 times torque test (1.2Nm).	**Pass**
24	**Critical components check**	- Internal wires were not listed on the CDF except for connected with grill.	**Fail**
22	**Construction**		**Pass**
23	**Internal wire**		**Pass**
29	**Creepage distances, clearances and solid insulation**		**Pass**

Section 3: EUP Test

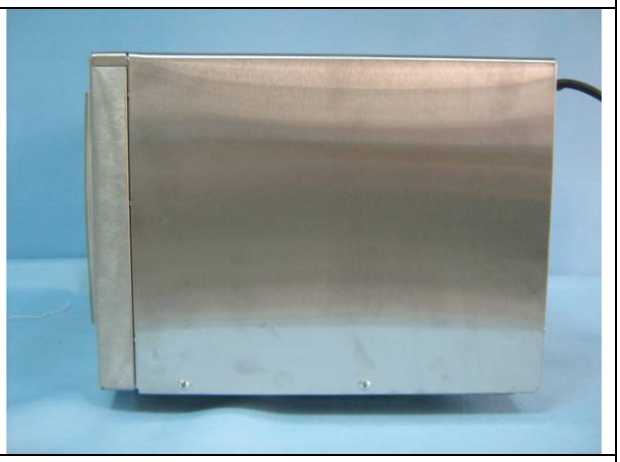
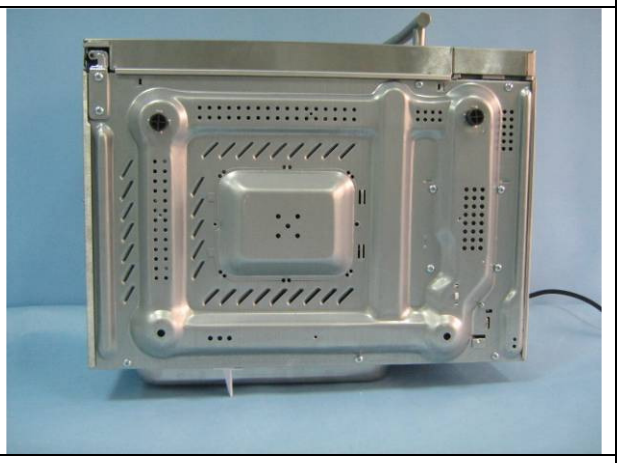
Testing conditions:					
Ambient temperature:	27	℃	Frequency fluctuation of the supplied power:	±1	%
Voltage fluctuation:	±1	%			
Measurement method used:	EN 62301				
Remarks:	Only “Off mode” has been considered.				

Test data:

Input Voltage/frequency	Mode	Input current	Power consumption	Limit	Result
---	Standby mode	---	---	**N/A**	**N/A**
230 V / 50 Hz	Off mode	10.37 mA	0.04 W	**1 W**	**Pass**

Section 4: Test Photos

4.1 Photos of test sample

Front view	Rear view
	
Side view	Side view
	
Top view	Bottom view

4.2 User test photos

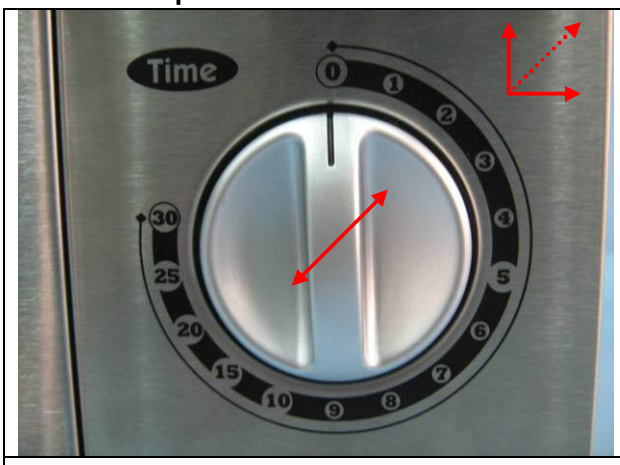
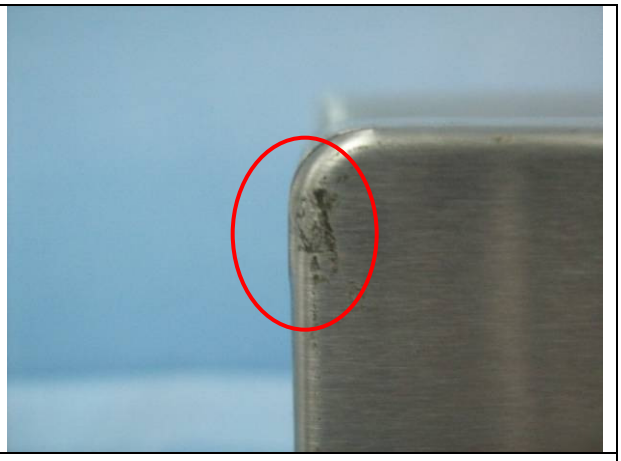
	

Photo 1: The timer knob has play	Photo 2: There is a dirt spot on front top corner

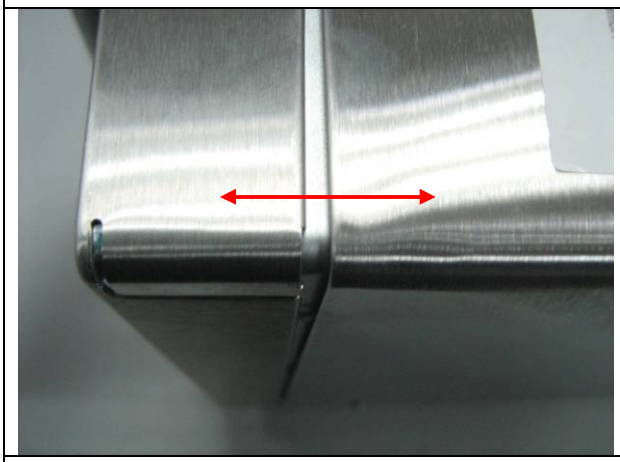
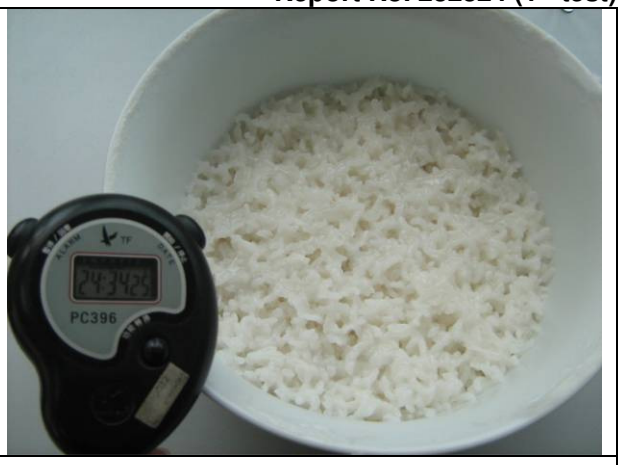



Photo 3: The control panel has play	Photo 4: Power test for microwave
Photo 5: Power test for grill	Photo 6: Measured value for 2 min setting

	
Photo 7: Cooking a bowel rice before	Photo 8: Cooking a bowel rice after

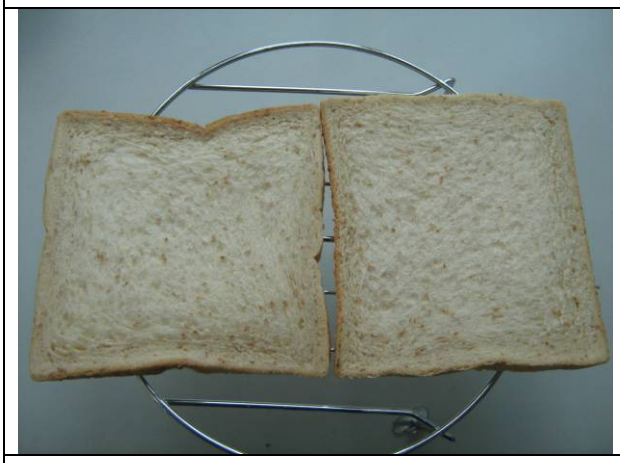
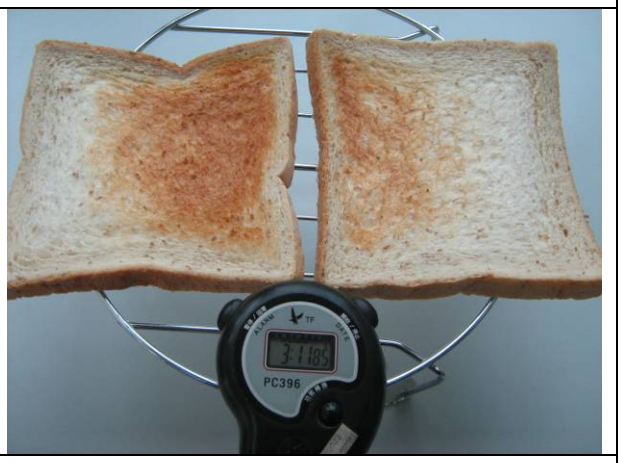

	

Photo 9: Grilling bread before	Photo 10: Grilling bread after
Photo 11: Cooking scrambled eggs before	Photo 12: Cooking scrambled eggs before

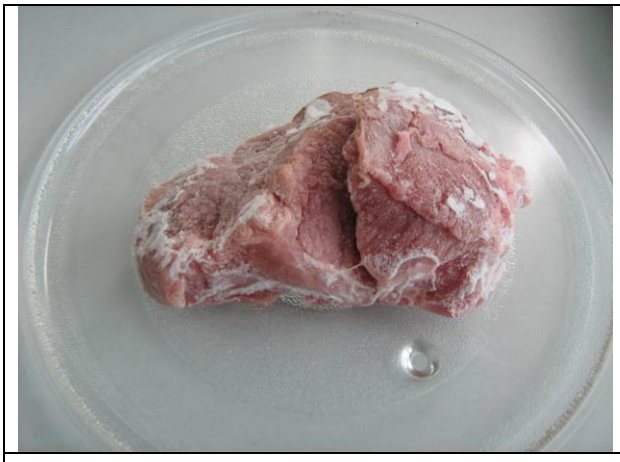


Photo 13: Defrosting pork before

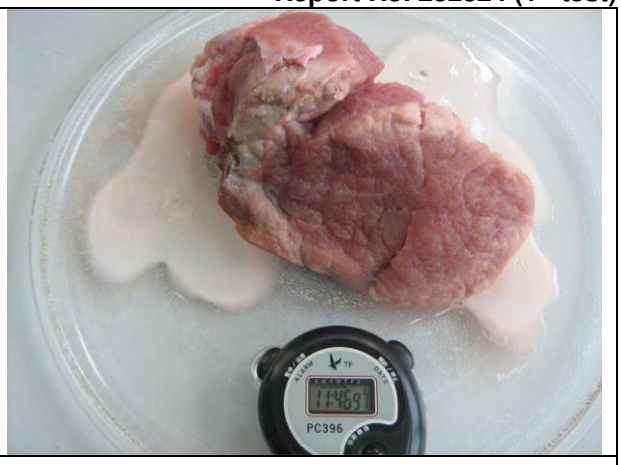


Photo 14: Defrosting pork after

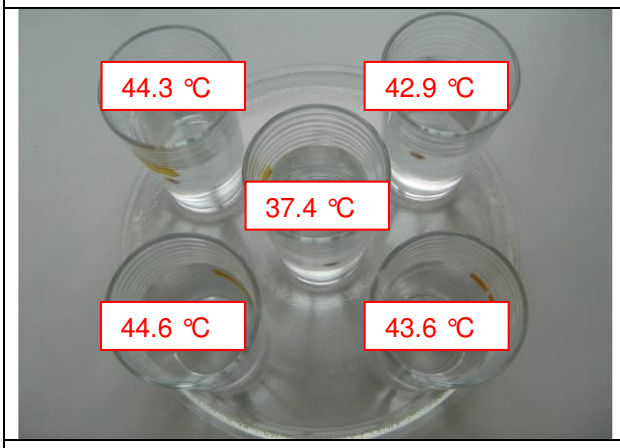
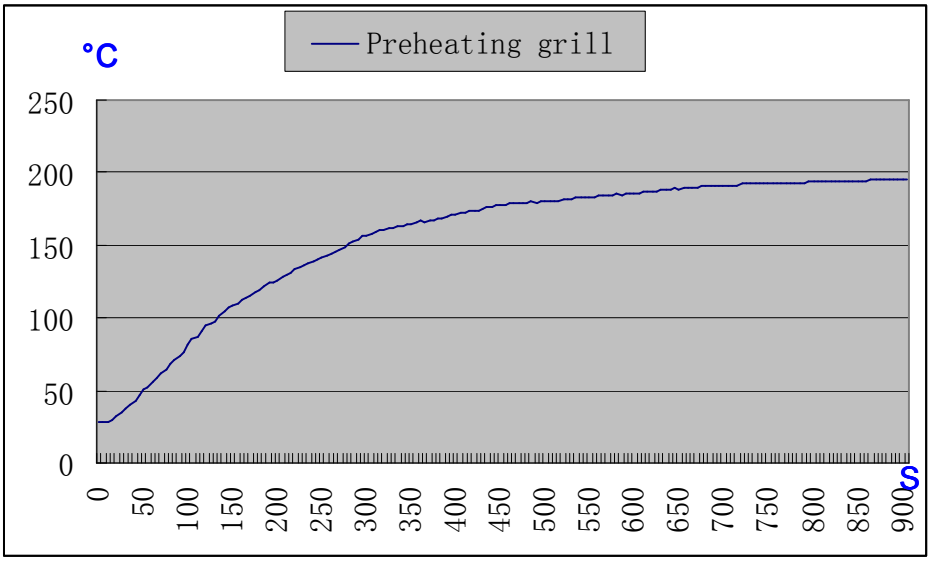


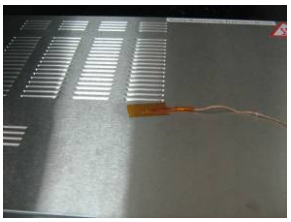
Photo 15: WM distribution

Photo 16: Placement of thermocouples on the grid



Graph 17: The temperature graph of the grid

Photo 18: Placement of thermocouples



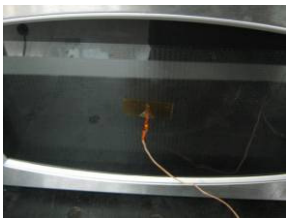
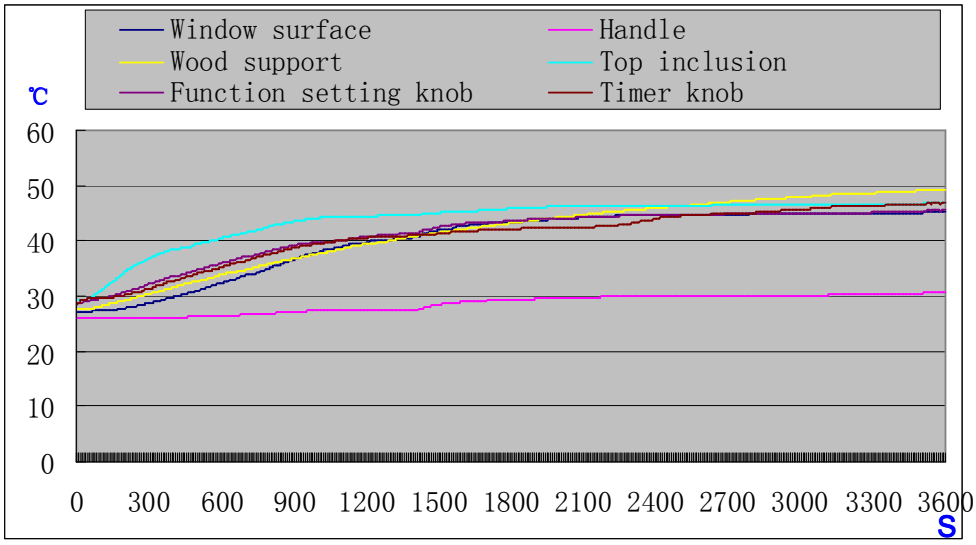


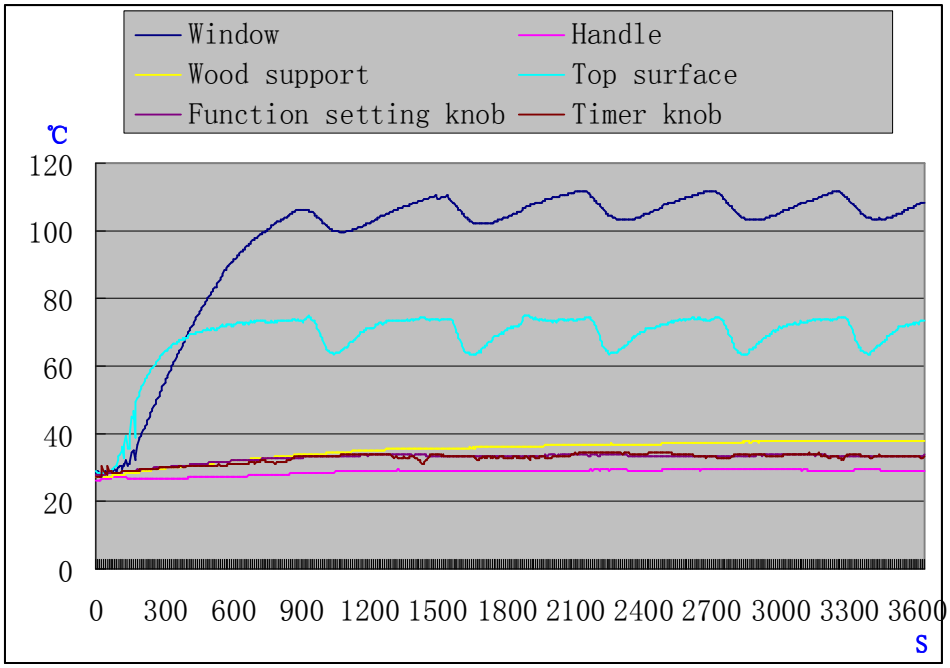
Photo 19: Placement of thermocouples for top inclusion and window surface

Photo 20: Placement of thermocouples for handle and function setting knob

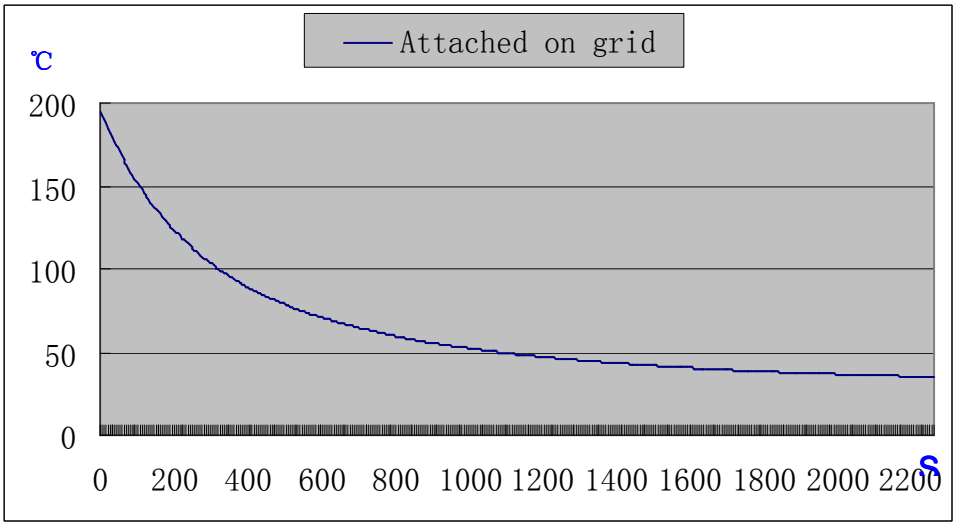
Photo 21: Placement of thermocouples for timer knob



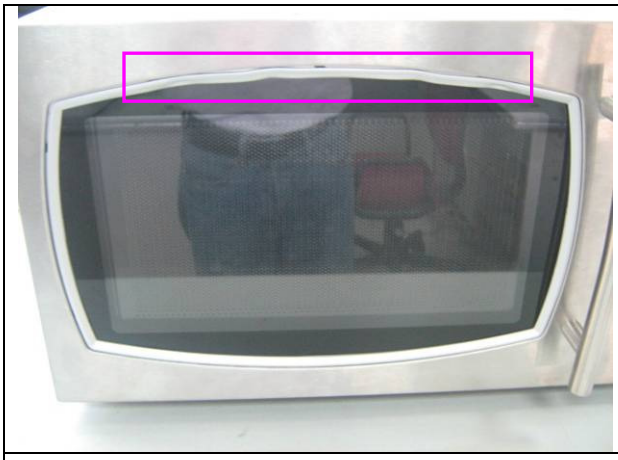
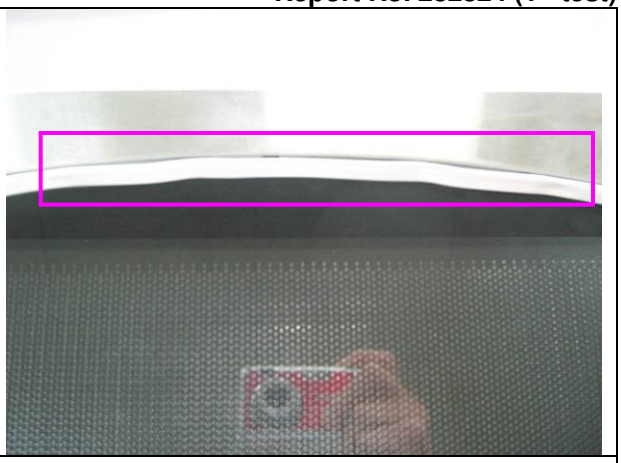
Graph 22: Temperature graph of accessible parts at microwave mode



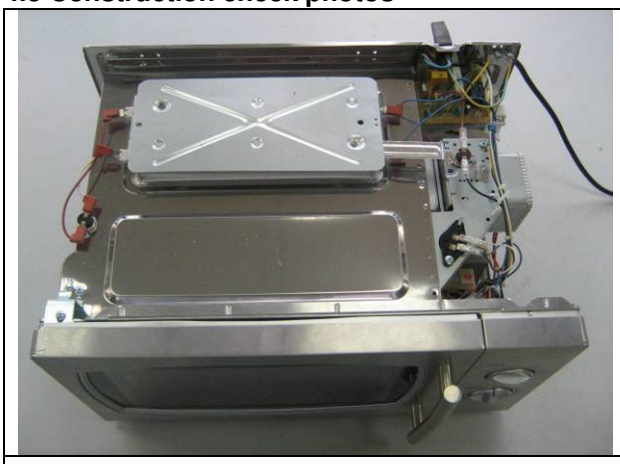
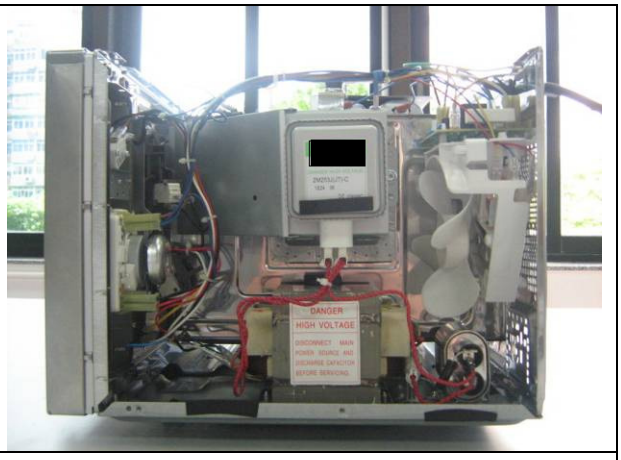
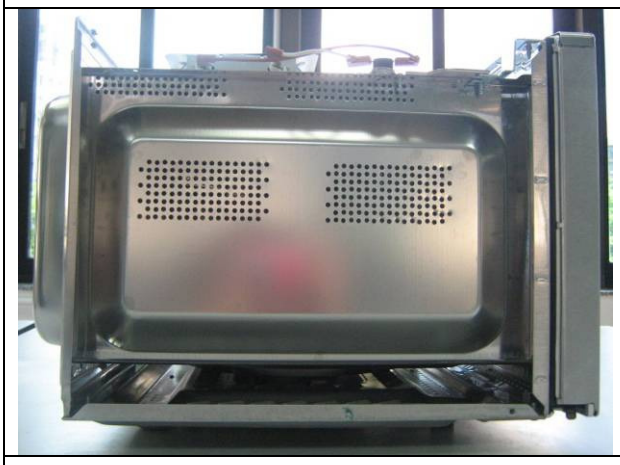
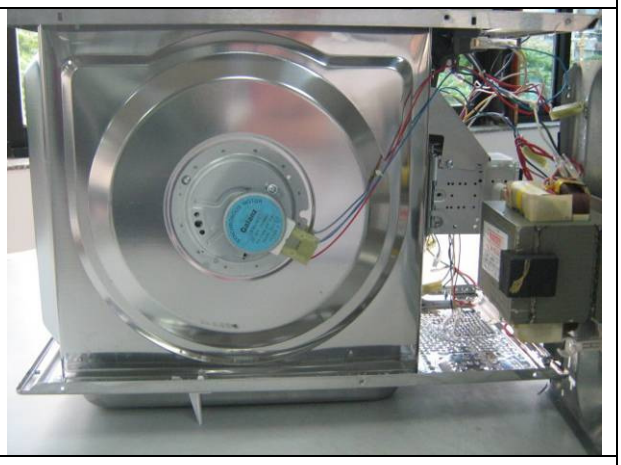
Graph 23: Temperature graph of accessible parts at grill mode

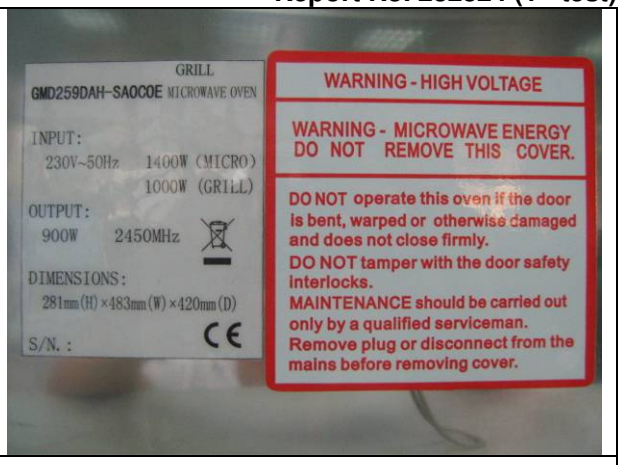
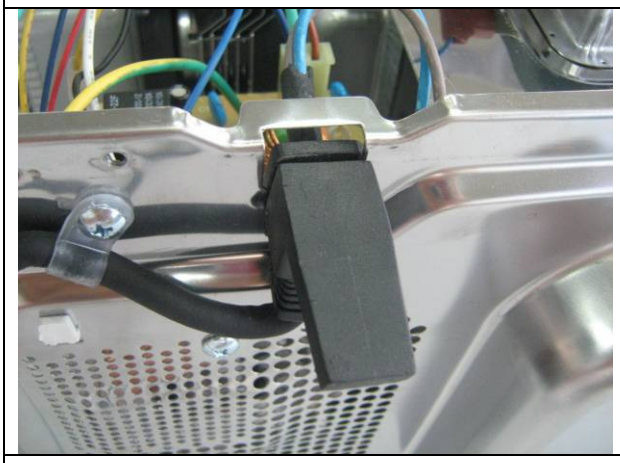
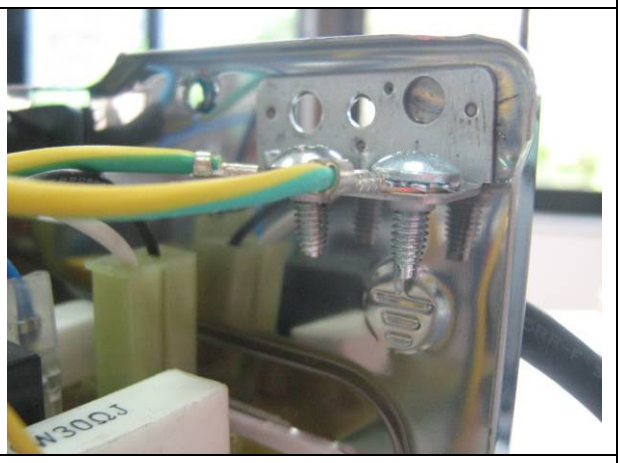


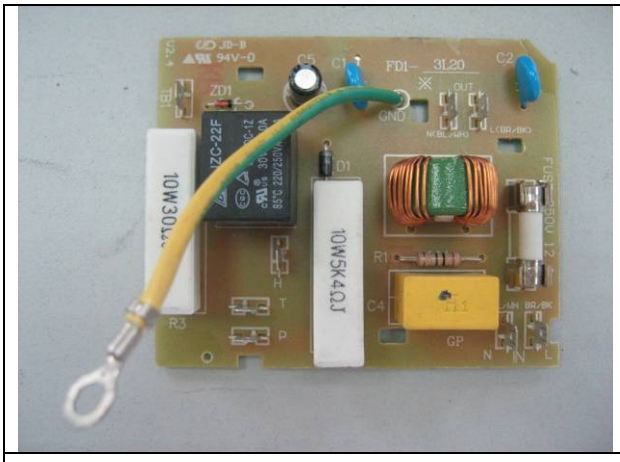
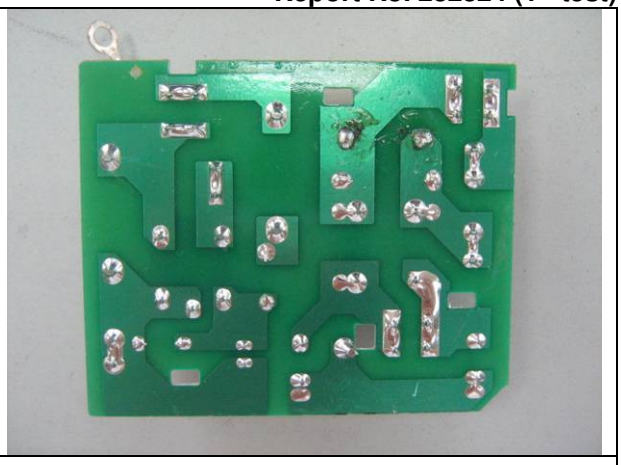
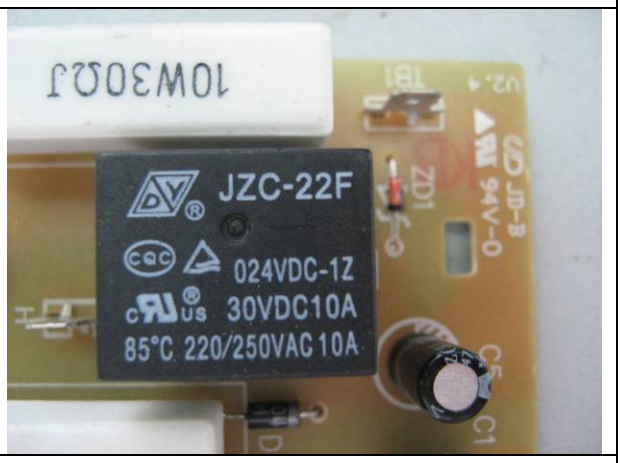
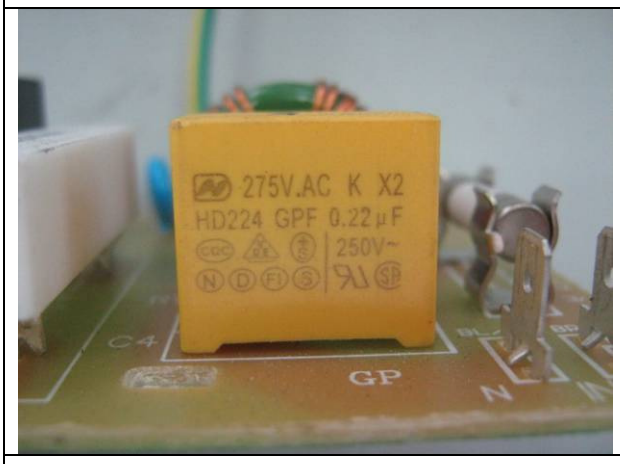
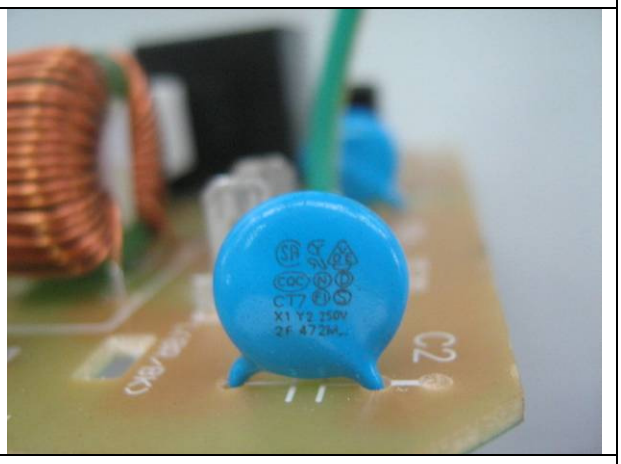
Graph 24:Temperature graph of oven inside cool down

	
Plastic frame used to fix the window was a little distortion after grill function heating test.	

4.3 Construction check photos

	
Internal view 1	Internal view 2
	
Internal view 3	Internal view 4
Cavity	Spacer

	
Warning	Rating label
	
Cord anchorage	Earthing terminal and earthing symbol
Plug	Power cable

	
Noise filter PCB view	Bottom view of noise filter PCB
	
Current fuse on noise filter PCB	Relay on noise filter PCB
	
X2 capacitor on noise filter PCB	Y2 capacitor on noise filter PCB

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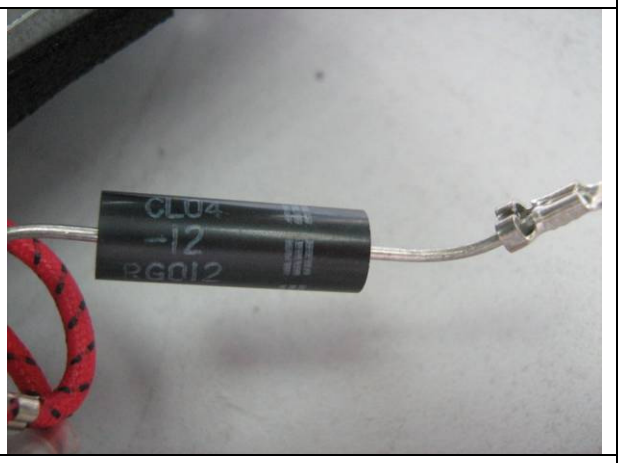
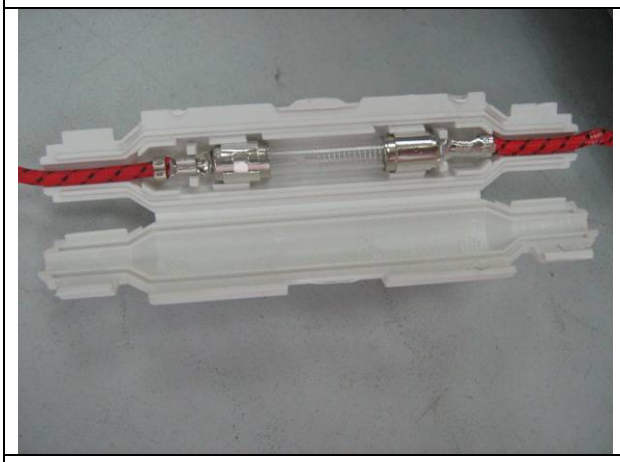
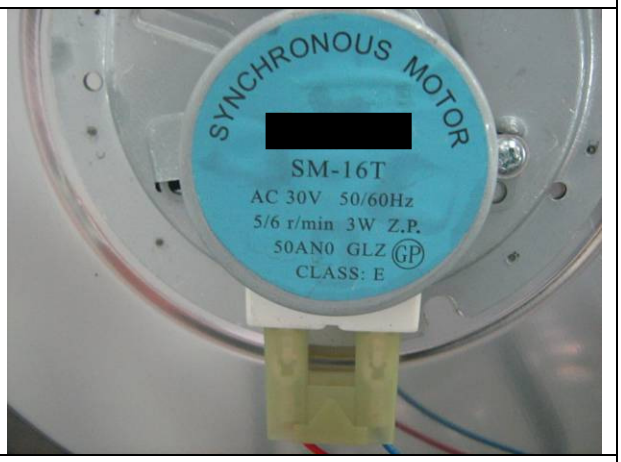
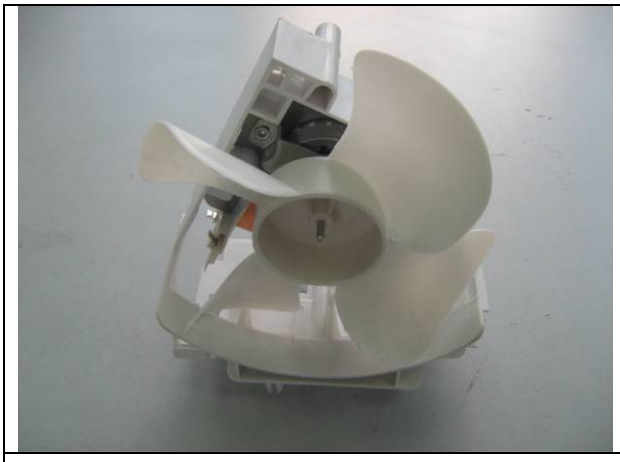
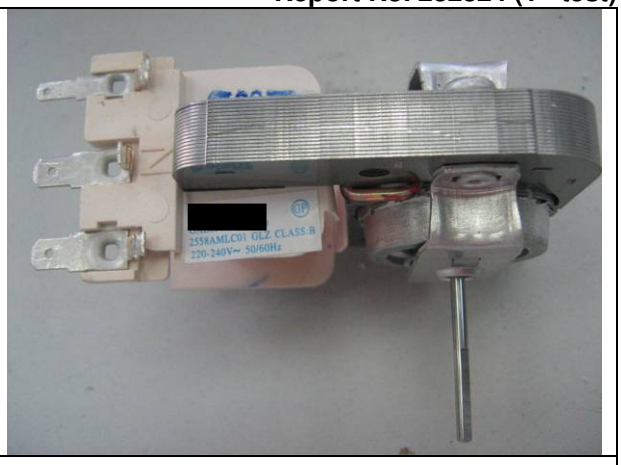
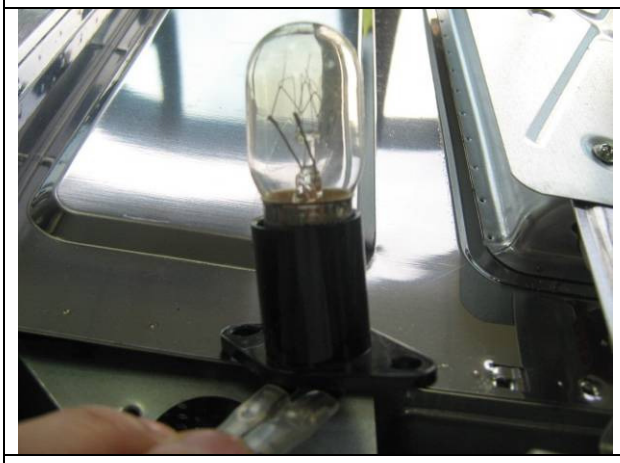
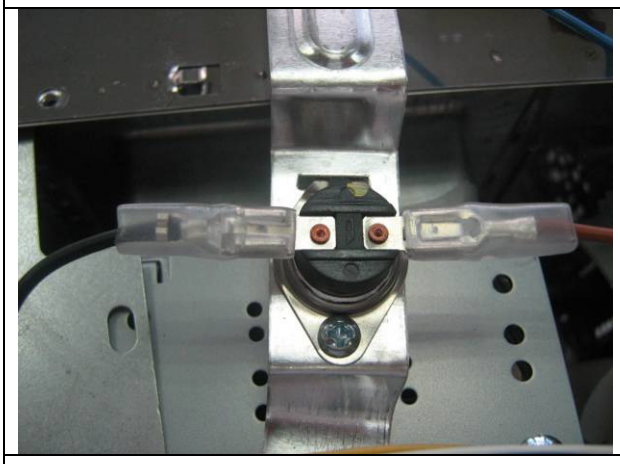
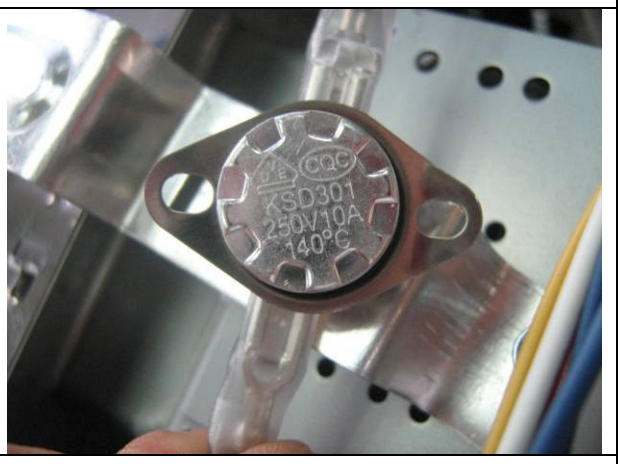
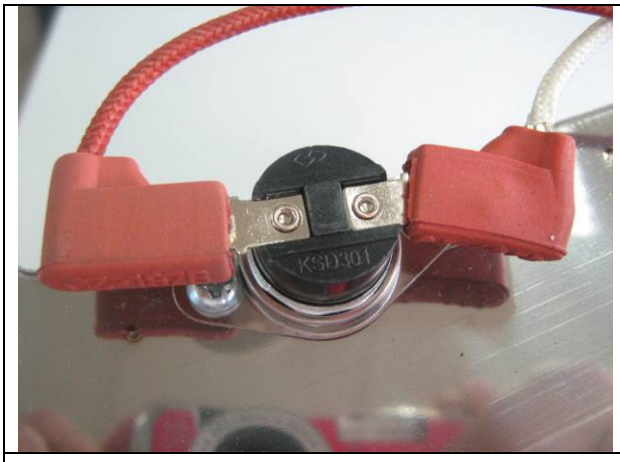
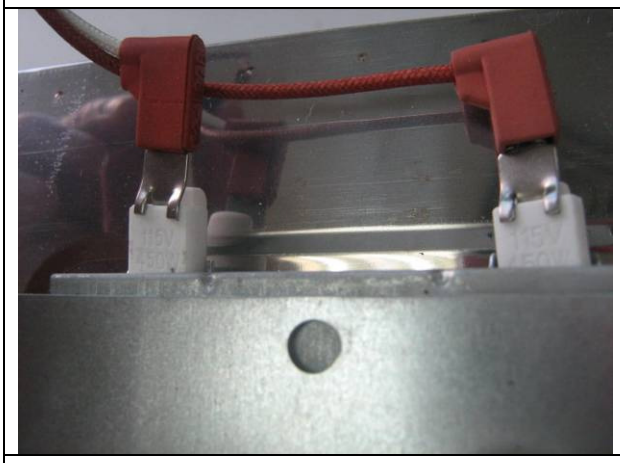
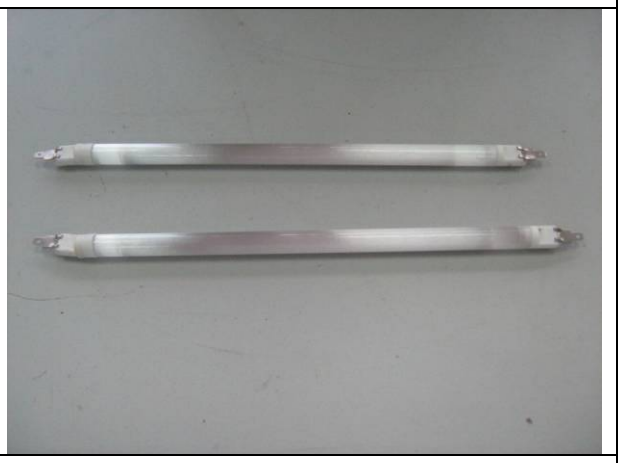
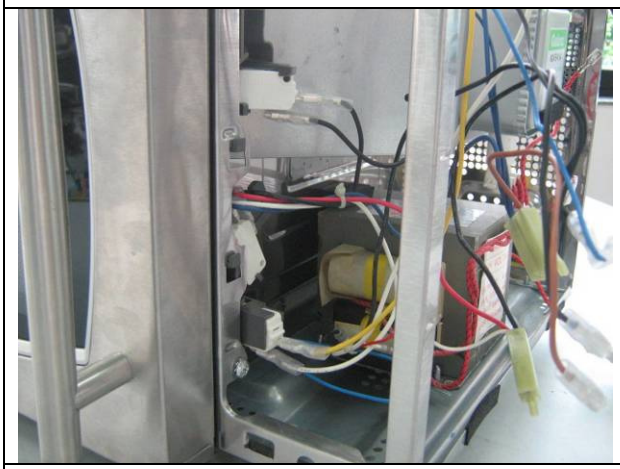
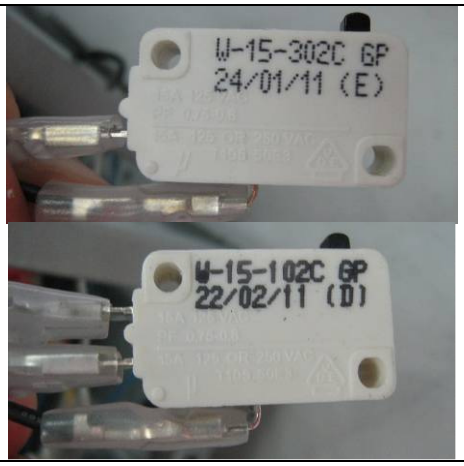
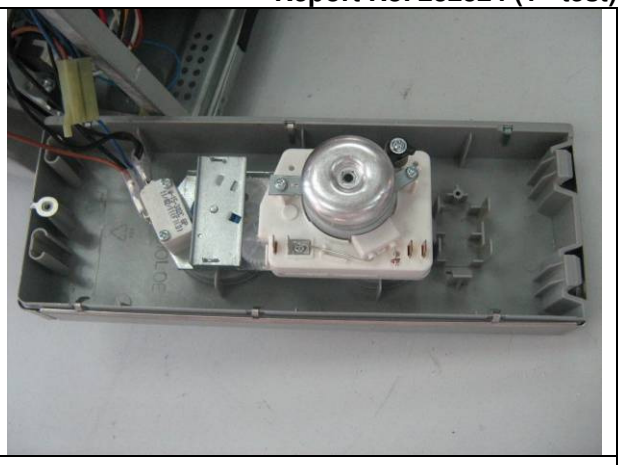
Magnetron	H.V. transformer
	
H.V. capacitor	H.V. diode
	
H.V. current fuse	Turntable motor

	
Fan motor construction	Fan motor marking
	
Lamp	Lampholder
	
Thermal cut out on magnetron	Marking of thermal cut out on magnetron

	
Thermal cut out on oven	Marking of thermal cut out on oven
	
Heating element marking	Heating element
	
Door interlock system	Interlock / monitor switch

	
Control panel	Control panel view
Function switch	Timer

Pre-Purchase Check

Issuing date: 15/06/11
Report No. 232324 (1st test)

Critical components list

Components	Manufacturer / Trademark	Type / Model	Value / Rating	Approval / Reference	Match with CDF
Power plug	-	GAL-01V	250V~ 16A	VDE	Yes
Power cord	Recheer	H05RR-F	3G0.75mm^2	VDE	Yes
Current fuse on noise filter PCB	---	---	F12AL 250V	TUV	Yes
Relay on noise filter PCB		JZC-22F 024VDC-1Z	10A 250V~	TUV	Yes
X2 capacitor on noise filter PCB		HD224	0.22µF 275V~	VDE	Yes
Y2 capacitor on noise filter PCB	---	CT7	4700pF 250V~	VDE	Yes
Magnetron	-	M24FB-610A	---	Tested with appliance	Yes
H. V. transformer	---	GAL-900E-4	230-240V~ 50Hz Class 220	Tested with appliance	Yes
H. V. current fuse	---	---	5KV 0.8A	TUV	Yes
H. V. capacitor	BICAI	CH85 21100	2100V AC 50/60Hz 1.00µF 10/85/21	VDE	Yes
H. V. diode	---	CL04-12	---	Tested with appliance	Yes
Thermal cut-out on magnetron	---	KSD301	250V 10A 140℃	VDE	Yes
Thermal cut-out on oven	---	KSD301 B100	---	VDE	Yes
Lamp holder	YUYAO CHANGHONG	E14-A	250V 2A T170	Tested with appliance	Yes
Timer	-	TMH30MU02E	Contact: 15A/250V AC Rated voltage: AC 220/240V 50Hz	Tested with appliance	Yes
Switch for interlock and monitor	-	W-15-302C W-15-102C	15A 250V~ 5E4 T105	VDE	Yes

Pre-Purchase Check

Issuing date: 15/06/11
Report No. 232324 (1st test)

Components	Manufacturer / Trademark	Type / Model	Value / Rating	Approval / Reference	Match with CDF
Fan motor	-	GAL6309E(30)-ZD	220-240V~ 50/60Hz Class B	Tested with appliance	Yes
Turntable motor	-	SM-16T	AC30V 50/60Hz 3W Class E	Tested with appliance	Yes
Heating element	---	---	115V 450W x 2pcs	Tested in appliance	Yes
PCB	---	JD-B	94V-0	UL	Yes
Internal wire	QILIANG / KE LIN	1569	18AWG/22AWG 300V 105℃	UL	Missing
Internal wire to heating element	FENG TAI	1332	18AWG 200℃ 300V	UL	Yes
Internal wire for magnetron and H V transformer	---	---	---	---	---

**** End of report ****